

What is claimed is:

- 1) Seed of maize inbred line NP2222 having been deposited under ATCC Accession No: PTA-3967.

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- 2) A maize plant, or parts thereof, of inbred line NP2222, seed of said line having been deposited under ATCC Accession No: PTA-3967.

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- 3) Pollen of the plant of claim 2.

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- 4) An ovule of the plant of claim 2.
- 5) A maize plant, or parts thereof, having all the physiological and morphological characteristics of a plant according to claim 2.

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- 6) The maize plant, or parts thereof, of claim 5, wherein the plant or parts thereof have been transformed so that its genetic material contains one or more transgenes operably linked to one or more regulatory elements.

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- 7) A method for producing a maize plant that contains in its genetic material one or more transgenes, comprising crossing the maize plant of claim 6 with either a second plant of another maize line, or a non-transformed maize plant of the line NP2222, so that the genetic material of the progeny that result from the cross contains the transgene(s) operably linked to a regulatory element.

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- 8) A maize plant, or parts thereof, according to claim 2, further comprising one or more transgenes.

- 9) A maize plant, or parts thereof, according to claim 8, wherein the plant or parts thereof have been transformed so that its genetic material contains one or more transgenes operably linked to one or more regulatory elements.

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- 10) A method for producing a maize plant that contains in its genetic material one or more transgenes, comprising crossing the maize plant of claim 9 with either a second plant of another maize line, or a non-transformed maize plant of the line PH2EJ, so that the genetic material of the progeny that result from the cross contains the transgene(s) operably linked to a regulatory element.
- 11) A maize plant according to claim 9, wherein said one or more transgenes comprises a gene conferring upon said maize plant tolerance to a herbicide.
- 10        12) A maize plant according to claim 11, wherein said herbicide is glyphosate, gluphosinate, a sulfonylurea or an imidazolinone herbicide, a hydroxyphenylpyruvate dioxygenase inhibitor or a protoporphyrinogen oxidase inhibitor.
- 15        13) A maize plant according to claim 9, wherein said one or more transgenes comprises a gene conferring upon said maize plant insect resistance, disease resistance or virus resistance.
- 14) A maize plant according to claim 13, wherein said gene conferring upon said maize plant insect resistance is a *Bacillus thuringiensis* Cry1Ab gene.
- 15) A maize plant according to claim 14, further comprising a *bar* gene.
- 16) A maize plant according to claim 14, wherein said Cry1Ab gene is introgressed into said maize plant from a maize line comprising a Bt-11 event or a 176 event.
- 17) Seed of a plant according to claim 9.
- 18) A tissue culture of regenerable cells of a maize plant according to claim 2, wherein the tissue regenerates plants capable of expressing all the morphological and physiological characteristics of plants according to claim 2.

- 5            19) A tissue culture according to claim 18, the regenerable cells being selected from the group consisting of embryos, meristems, pollen, leaves, anthers, roots, root tips, silk, flowers, kernels, ears, cobs, husks and stalks, or being protoplasts or callus derived therefrom.
- 10            20) A maize plant regenerated from the tissue culture of claim 18, capable of expressing all the morphological and physiological characteristics of inbred line NP2222, seed of said inbred line having been deposited under ATCC Accession No: PTA-3967.
- 15            21) A maize plant, or parts thereof, wherein at least one ancestor of said maize plant is the maize plant of claim 2, said maize plant expressing a combination of at least two NP2222 traits selected from the group consisting of: a relative maturity of approximately 95 to 115 days based on the Comparative Relative Maturity Rating System for harvest moisture of grain, good grain quality, acceptable to good Northern Corn Leaf Blight resistance, good Eyespot resistance, acceptable Common Rust resistance, good First Brood Corn Borer resistance, above average early growth, good seedling vigor, early pollen shed, resistance to stalk diseases, reliable late season plant health, good pollen shed, improved stalk strength, acceptable late season intactness, and adapted to the Northern and Central Cornbelt regions of the United States.
- 20            22) A method for developing a maize plant in a maize plant breeding program using plant breeding techniques, which include employing a maize plant, or its parts, as a source of plant breeding material, comprising: obtaining the maize plant, or its parts, of claim 2 as a source of said breeding material.
- 25            23) A maize plant breeding program of claim 22, wherein plant breeding techniques are selected from the group consisting of: recurrent selection, backcrossing,
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pedigree breeding, restriction fragment length polymorphism enhanced selection, genetic marker enhanced selection, and transformation.

- 24) A maize plant, or parts thereof, produced by the method of claim 22.
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- 25) A method for producing maize seed comprising crossing a first parent maize plant with a second parent maize plant and harvesting the resultant first generation maize seed, wherein said first or second parent maize plant is the inbred maize plant of claim 2.
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- 26) A method according to claim 25, wherein said first parent maize plant is different from said second parent maize plant, wherein said resultant seed is a first generation (F1) hybrid maize seed.
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- 27) A method according to claim 25, wherein inbred maize plant of claim 2 is the female parent.
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- 28) A method according to claim 25, wherein inbred maize plant of claim 2 is the male parent.
- 29) An F1 hybrid seed produced by the method of claim 25.
- 30) An F1 hybrid plant, or parts thereof, grown from the seed of claim 29.
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- 31) A maize plant, or parts thereof, wherein at least one ancestor of said maize plant is the maize plant of claim 5, said maize plant expressing a combination of at least two NP2222 traits selected from the group consisting of: a relative maturity of approximately 95 to 115 days based on the Comparative Relative Maturity Rating System for harvest moisture of grain, good grain quality, acceptable to good Northern Corn Leaf Blight resistance, good Eyespot resistance, acceptable Common Rust resistance, good First Brood Corn Borer resistance, above average
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early growth, good seedling vigor, early pollen shed, resistance to stalk diseases, reliable late season plant health, good pollen shed, improved stalk strength, acceptable late season intactness, and adapted to the Northern and Central Cornbelt regions of the United States.

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- 32) A method for developing a maize plant in a maize plant breeding program using plant breeding techniques, which include employing a maize plant, or its parts, as a source of plant breeding material, comprising: obtaining the maize plant, or its parts, of claim 5 as a source of said breeding material.

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- 33) The maize plant breeding program of claim 32 wherein plant breeding techniques are selected from the group consisting of: recurrent selection, backcrossing, pedigree breeding, restriction fragment length polymorphism enhanced selection, genetic marker enhanced selection, and transformation.

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- 34) A maize plant, or parts thereof, produced by the method of claim 33.

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- 35) A method for producing maize seed comprising crossing a first parent maize plant with a second parent maize plant and harvesting the resultant first generation maize seed, wherein said first or second parent maize plant is the inbred maize plant of claim 5.

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- 36) A method according to claim 35, wherein said first parent maize plant is different from said second parent maize plant, wherein said resultant seed is a first generation (F1) hybrid maize seed.

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- 37) A method according to claim 35, wherein inbred maize plant of claim 5 is the female parent.

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- 38) A method according to claim 35, wherein inbred maize plant of claim 5 is the male parent.

- 39) An F1 hybrid seed produced by the method of claim 35.
- 40) An F1 hybrid plant, or parts thereof, grown from the seed of claim 39.
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- 41) A method comprising:
- 10      a) planting a collection of seed comprising of a hybrid, one of whose parents is a plant according to claim 2, or a maize plant having all the physiological and morphological characteristics of a plant according to claim 2, said collection also comprising seed of said inbred line;
- 15      b) growing plant from said collection of seed;
- 15      c) identifying said inbred plants;
- 20      d) selecting said inbred plants; and
- 20      e) controlling pollination in a manner which preserves the homozygosity of said inbred plant.
- 42) A method for producing a maize plant , comprising:
- 20      a) crossing a first parent maize plant with a second parent maize plant;
- 25      b) harvesting the resultant first generation maize seed, and
- 25      c) growing said first generation maize seed to yield progeny maize seed.
- 43) The method of claim 42, further comprising:
- 25      a) crossing said maize plant of method 42 with itself or another maize plant to yield additional NP2222-derived maize seed;
- 25      b) growing said NP2222-derived maize seed under step a) to yield additional NP2222-derived plants;
- 30      c) repeating the crossing and growing steps of a) and b) from 0 to 5 times to generate further NP2222-derived maize plants.
- 30      44) A maize plant, or parts thereof, produced by the method of claim 43.

- 45) A maize plant, or parts thereof, wherein at least one ancestor of said maize plant is produced by the method of claim 43, said maize plant expressing a combination of at least two NP2222 traits selected from the group consisting of: a relative maturity of approximately 95 to 115 days based on the Comparative Relative Maturity Rating System for harvest moisture of grain, good grain quality, acceptable to good Northern Corn Leaf Blight resistance, good Eyespot resistance, acceptable Common Rust resistance, good First Brood Corn Borer resistance, above average early growth, good seedling vigor, early pollen shed, resistance to stalk diseases, reliable late season plant health, good pollen shed, improved stalk strength, acceptable late season intactness, and adapted to the Northern and Central Cornbelt regions of the United States.
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- 46) A method comprising introgressing a single gene trait into inbred maize line NP2222, seed of said line having been deposited under ATCC Accession No: PTA-3967, using one or more markers for marker assisted selection among maize lines to be used in a maize breeding program, the markers being associated with a single gene trait, wherein the resulting maize line is inbred maize line NP2222 further comprising said single gene transferred trait.
- 20 47) A method according to claim 46, wherein said a single gene trait comprises a Cry1Ab gene.